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# P2000 - GENERATIVE ARTIFICIAL INTELLIGENCE (GEN AI)

| DOCUMENT NUMBER: | P2000          |
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# **1. A**UTHORITY

To effectuate the mission and purposes of the Arizona Department of Administration (the "Department"), the Department shall maintain a "coordinated statewide plan for information technology" implemented and maintained through policies, and "adopting statewide technical, coordination and security standards" as authorized by Arizona Revised Statute A.R.S. § 18-104 (A)(1)(a). The Department shall also "formulate policies, plans and programs to effectuate the government information technology purposes of the department" pursuant to A.R.S. § 18-104 (A)(13).

## 2. PURPOSE

The purpose of this Policy is to provide a consistent and thoughtful management approach to the use of generative artificial intelligence technologies in this State that will continue to foster an environment for innovation while complying with law, protecting data privacy, ensuring accuracy and efficiency in public service.

- **2.1.** Generative AI refers to a set of technologies that utilize machine learning techniques to generate content in response to user inputs. The content produced can be textual, visual, spoken or even musical.
- **2.2.** These tools have the potential to be extraordinarily useful to public servants in their work, but they also present risks. Therefore, this Policy and any associated procedures or guidelines serve as a resource for employees of the State to encourage responsible use of these emerging technologies.

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- **2.3.** As employees of the State, we are responsible for safeguarding the sensitive data provided to the various Budget Units. We must act in the best interests of the public by preserving the public trust.
- **2.4.** Generative AI is a tool, which employees of the State may engage to further their work, but is not a substitute for our entrusted responsibilities. As public servants we remain responsible for our judgment and responsible use of the tools provided to us. We remain responsible for the outcomes and uses of these tools.
- **2.5.** As we explore the responsible use of generative artificial intelligence, we embrace the following principles to guide our efforts. These shared values of empowerment, inclusion and respect, transparency and accountability, innovation and risk management, collaboration will steer our exploration and decision-making when employing these rapidly evolving technologies.
- **2.6.** This Policy is meant to empower our employees, build trust with the public, spark progress, and ensure GenAI serves the public good.
- **2.7.** Nothing in this Policy shall be construed to limit or bypass compliance requirements with privacy standards to include, but not limited to Arizona Policy P8410: System Privacy.

# 3. Scope

This Policy applies to all Budget Units, as defined in A.R.S. § 18-101, and IT integrations and/or data exchange with third parties that perform IT functions, activities or services for or on behalf of Budget Units. Applicability of this Policy to third parties is governed by contractual agreements entered into between Budget Units and the third party/parties. In addition, policies, standards and procedures for security technology are covered by Policy 8120: Information Security Program.

# 4. ROLES AND RESPONSIBILITIES

- **4.1.** State Chief Information Officer (CIO) or his/her designee shall:
  - **4.1.1.** Collaborate with the State Chief Information Security Officer to evaluate State Security and Privacy Policies to determine if any updates are required to align with this Policy.

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- **4.1.2.** Periodically review State Security and Privacy Policies to determine if any updates are required to align with this Policy.
- **4.2.** Budget Unit Chief Information Officer (CIO) or his/her designee shall:
  - **4.2.1.** Ensure that all Generative AI solutions deployed or used by the Budget Unit comply with applicable Information Technology and Cybersecurity statewide policies and procedures.
  - **4.2.2.** Determine minimum training requirements for Budget Unit personnel to complete before engaging with Generative AI in the course of their business duties to include the risks of using Generative AI and potential risks to state data.
  - **4.2.3.** Assign appropriate personnel to oversee and approve the use of Generative AI within the Budget Unit including evaluation and authorization of requests within the Budget Unit.
  - **4.2.4.** Define a clear scope of work and metrics to determine the impact of the use of Generative AI.
  - **4.2.5.** Ensure that solution architecture and workflow diagrams are created and maintained for each Generative AI solution that is deployed or used by the Budget Unit.
  - **4.2.6.** Periodically review Generative AI usage within the Budget Unit to ensure that it adheres to policy and reflects the strategies and priorities of the Budget Unit and the State.
  - **4.2.7.** Periodically review the performance of Generative AI solutions in use to assess effectiveness, consistency with alignment to the values listed in this document, accuracy, bias, and possible unintended outcomes.
- **4.3.** Individual Budget Unit Users shall:
  - **4.3.1.** Become familiar with statewide and Budget Unit specific IT and Cybersecurity policies, standards and procedures regarding the use of Generative AI prior to utilizing these tools.

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- **4.3.2.** Adhere to statewide and Budget Unit specific IT and Cybersecurity policies, standards and procedures pertaining to the use of Generative AI in the execution of their job duties and/or while using State or Budget Unit resources (including any State equipment).
- **4.3.3.** Complete any training prescribed by their Budget Unit prior to engaging with any authorized Generative AI solution.

## 5. POLICY

- **5.1. General:** Generative AI is a powerful tool that can be used to improve government services and operations. When making use of generative AI tools and capabilities, state Budget Units and users should consider the following general principles:
  - **5.1.1. Empowerment**. Al should be utilized to support our workforce to deliver enhanced services and products efficiently, safely, and equitably to the public. We rely on the judgment of our professionals to ensure we realize the benefits of these tools.
  - **5.1.2. Transparency and Accountability**: We acknowledge the limits of foresight. But transparency builds trust and enables collective learning. When AI is used, we must disclose that responsibly and share our workflow freely with other public servants and with the public. Budget Units must be transparent about how they are using generative AI. This shall include full attribution to which GenAI tool is used (see 2000PR Use of Generative AI Procedure for resources).
    - 5.1.2.1. All copyrightable works owned by the state that are created with the involvement of generative AI must include an accompanying annotation sufficient to meet the requirements of the U.S. Copyright Office for Works Containing Material Generated by Artificial Intelligence (88 FR 16190). The annotation should include at least the generative AI technology used and a description of how it was used to create the work.
    - 5.1.2.2. Detail the AI model, prompts, and methods employed. This documentation aids comprehension and safe usage by colleagues and stakeholders. Sample AI-generated content disclosures:

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"This content was generated with the aid of ChatGPT and subsequently revised by the staff of Agency \_\_\_\_\_\_."

"This text was summarized for clarity using Google Bard."

- 5.1.2.3. Budget Units are encouraged to consider whether more specific policy and guidelines regarding disclosure of Generative AI assisted work products will best serve the public's need for transparency.
- 5.1.2.4. Budget Units are accountable for the decisions that are made and materials created using generative AI.
- **5.1.3. Fairness**: The use and development of AI should uplift communities, connecting them effectively with resources to thrive, especially those historically marginalized. As public stewards, we will use tools respectfully to reflect values of equity and social justice. AI systems can reflect the cultural, economic, and social biases of the source materials used for training, and the algorithms used to parse and process that content can be a source of bias as well. Budget Units shall make best efforts to ensure that generative AI is used in a fair and equitable manner.
- **5.1.4. Security**: We embrace responsible experimentation that maintains control and respects privacy and security while developing uses that drive efficiency, dialogue, and better service. Budget Units shall take steps to protect the security and integrity of generative AI models. Arizona Department of Homeland Security's cybersecurity staff are available to provide technical support in securing AI resources which may include requiring proactive risk assessment.
- **5.1.5. Privacy:** Budget Units must protect the privacy of individuals when using generative AI. This means that any models shall not be used to collect or store personal information without the consent of the individual.
  - 5.1.5.1. Budget Units must comply with all records management, privacy and other applicable laws, rules, and policies to ensure the appropriate and reasonable protection of data and the protection of rights of persons that may be impacted by information furnished by AI.
  - 5.1.5.2. No confidential data, as defined in P8110 Data Classification Policy, shall be added to a publicly accessible AI service or training model.

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- 5.1.5.3. Material that is inappropriate for public release shall not be entered as input to generative AI tools that have not been explicitly approved for the intended use case.
- **5.1.6. Training:** Budget Units shall mandate a minimum level of AI training for users responsible for business processes which are incorporating generative AI.
  - 5.1.6.1. ADOA will provide training on proper usage of generative AI for users. Budget Units shall ensure that all users of tools consisting of or incorporating generative AI complete this training before being granted access and annually thereafter.

#### 5.1.7. Procurement:

- **5.1.7.1.** New Budget Unit contracts shall prohibit AI Vendors from using State of Arizona materials or data in generative AI queries or for building or training proprietary Generative AI programs unless explicitly approved in advance by the State in writing.
- **5.1.7.2.** Procuring Budget Units shall ensure vendors disclose the utilization of Generative AI when producing works owned by the State and integration of Generative AI in products used by the State.
- **5.1.7.3.** Procuring Budget Units shall perform due diligence to ensure proper licensure of model training data for all generative AI services using non-state data.
- **5.1.8. Collaboration:** Before deployment of Generative AI into any state production environment, Budget Units shall collaborate directly with the offices of the State CIO and the State CISO and review the use case, data classification, risk profile and security controls.
- **5.1.9.** Legal: There are unresolved legal issues surrounding Generative AI and the data inputs used to create Generative AI models. As Generative AI systems can be trained using copyrighted material and/or other intellectual property that has been sourced without regard for copyright or licensing terms, sources of inputs to models must be reviewed and usage risk evaluated by the Budget Unit.

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#### 5.2. Requirements

- **5.2.1.** All Generative AI software services, even if they are free or part of a pilot or proof-of-concept project, must be reviewed by Budget Units to ensure the AI software meets all necessary security and privacy requirements, including the Acceptable Use Policy. This requirement applies to downloadable software, Software as a Service (SaaS), web-based services, browser plug-ins, and smartphone apps. New AI software requests are subject to existing applicable Information Technology, Security and Privacy policies.
- **5.2.2.** Use of Generative AI technology that is incorporated into existing services and products, such as internet search engines, does not require permission to use, however this Policy's guidelines and other requirements must be followed.
- **5.2.3.** All outputs must be reviewed by knowledgeable human operators for accuracy, appropriateness, privacy, and security before being acted upon or disseminated. Generative Al outputs should not be assumed to be truthful, credible or accurate.
- **5.2.4.** Generative AI outputs shall not be used to impersonate individuals or organizations without their prior written permission.
- **5.2.5.** All software code generated through the use of Generative AI shall not be used in production until fully reviewed and tested for proper functionality and security. Any such use shall be properly documented.

## 6. DEFINITIONS AND ABBREVIATIONS

Refer to the <u>PSP Glossary of Terms</u> located on the ADOA-ASET website.

- **6.1.** Any terms not defined in this Policy are defined in statute or rule.
  - **6.1.1.** Al or Artificial Intelligence: The science and engineering of making machines capable of performing tasks that are typically associated with human intelligence, such as learning and problem-solving. When used in this Policy, AI includes without limitation AI systems, Classic AI, External AI, Generative AI and LLM AI.
  - **6.1.2.** Al or Artificial Intelligence Systems: Products and services that incorporate AI hardware and software components that support machine learning, expert systems, and robust data sets to be adaptable and autonomous in providing requested solutions.

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- **6.1.3.** Al Supplier or Al Vendor: Any entity that supplies Al services or components, such as research, development, training, implementation, deployment, maintenance, provision, or sale of Al systems.
- **6.1.4.** Classic (or Non-Generative) AI: Any system that uses aspects of Artificial Intelligence to apply predefined rules to automate steps in an existing workflow.
- **6.1.5. External AI Systems:** An AI model or engine that depends on infrastructure or data resources outside the immediate and complete control of the State.
- 6.1.6. Gen Al: See 'Generative Al' below.
- **6.1.7. Generative AI:** An AI system that learns the patterns and structures of input training data to generate new content.
- **6.1.8. LLM or Large Language Model AI:** Also referred to as Foundation Model AI, this is a type of AI that uses deep learning techniques to recognize, generate, translate, and/or summarize vast quantities of data (usually written human language and textual data). This type of AI is adaptable for use on a wide range of tasks.

## 7. REFERENCES

- **7.1.** A.R.S. § 18-104
- **7.2.** A.R.S. § 18-101

## 8. LINKS

# 9. VERSION HISTORY

| Date      | Change          | Revision | Signature  |
|-----------|-----------------|----------|------------|
| 3/15/2024 | Initial Version | 1.0      | J.R. Sloan |